

was reached on the 11th for the first time in 54 days; the highest stage recorded was 16.1 feet on the 13th, and a navigable stage continued during the remainder of the month.

Damaging floods occurred in the White River from Batesville, Ark., southward to the mouth, and also in the Black River in Arkansas. The damage by floods in these rivers aggregated about \$10,000.

No flood occurred in the Red River, but there was a sharp rise in the lower reaches of this stream toward the close of the month.

The Ouachita River at Camden rose from a stage of 8 feet on the 1st to 35.9 feet on the 17th, after which there was a steady fall. The lower Ouachita rose steadily after the 6th, when the gauge showed 6.3 feet and a stage of 28.4 feet was recorded at the close of the month.

The Mississippi River was above flood stage at the close of the month from Cairo to Arkansas City. At Memphis the flood stage was reached on the 24th, and the stage at the close of the month was 40.1 feet; Helena, the flood stage was reached on the 23d, and the stage at the close of the month was 47.6 feet; Arkansas City, the flood stage was reached on the 30th, and the stage at the close of the month was 47.8 feet. Stages at other stations at the close of the month were: Vicksburg, 44.3; Natchez, 42.6; Baton Rouge, 30.9; Donaldsonville, 23.9; and New Orleans, 14.8 feet.

The Atchafalaya was rising rapidly at the close of the month.

IRRIGATION BY PUMPING IN WESTERN KANSAS.

By F. D. COBURN, Secretary Kansas State Board of Agriculture.

Irrigation of the valleys in western Kansas by pumping, where water is near the surface, long since passed the experimental stage, and its possibilities are not yet fully realized, as each season sees some new development.

In the Arkansas River Valley from Garden City to Syracuse many pumping plants are in operation or being installed. Finney County alone has 50 or more plants, including a number on the upland, with capacity for irrigating approximately 6,500 acres. Kearny County has 40 plants, each of 1,000 gallons or more per minute, and Hamilton County has 8. These are all equipped with centrifugal pumps, and principally use gasoline or distillate engines for power. In addition and incidentally, it may be mentioned that considerable areas are also irrigated direct from the river or when water is available from that source and from reservoirs where flood waters are stored.

In the Arkansas River Valley the depth to water is only 8 to 10 and 15 feet. The main valley, 4 to 6 miles wide, bounded by sandy territory on the south and by the loamy uplands on the north, contains what is termed the "underflow," and here are the shallow wells. This so-called underflow has been developed sufficiently so that it is pretty well known what can be done with it.

The United States Sugar & Land Co., of Garden City, Kans., which controls extensive areas in that vicinity and owns and operates the beet-sugar mill there, has a novel central power station for pumping at Deerfield, in Kearny County, about 12 miles west of Garden City. They make a producer gas out of cheap residuum of oil, and have a 400-horsepower gas engine and a 350-kilowatt generator. The current developed by this generator is distributed over a transmission line 20 miles in length, and under this line the company has 14 pumping plants, with a capacity of 1,800 to 2,000 gallons per minute. About 3,500 acres are irrigated from this system. There

is also a Government plant at Deerfield which generates electric power to run 23 plants. These are shallow wells in the valley, however.

While developing the underflow for irrigating the valley lands is important, the great significance of the later investigations is demonstrated here and there that the uplands can be profitably irrigated by pumping from deep-bored wells, as these lands comprise by far the greatest acreage.

Only one of these big upland wells was in commission during the crop season of 1911. This was the J. W. Lough well, about 12 miles southwest of Scott, in Scott County. From it were irrigated 180 acres, all that could be made ready in time for planting, but the owner estimates that the well will take care of 320 acres.

Mr. Lough's well meets the water-bearing sand and gravel at a depth of 60 feet and extends through about 70 feet of it. Owing to the abundant supply of water available he has planned to put down other wells in this deposit and operate them by electric power something after the fashion of the Deerfield method of the United States Sugar & Land Co., previously described.

The writer received a letter from Mr. Lough, in which he says:

We now have two wells equipped with pumps and engines; both were thoroughly tested during the hot, dry months of July and August, 1911, by pumping day and night several days in succession, without lowering the water in the wells more than 12 or 14 feet.

The source of the water supply is undoubtedly in the Rocky Mountains of Colorado; it has been tested in different ways, showing that it constantly flows eastward. To my certain knowledge there is no difference in the volume of this underflow, whether the rainfall be scant or heavy.

The water is always clear, cold, soft, and pure, and healthful for the growing of all vegetation. This water is found in coarse sand and gravel and at different depths, say from 15 to 75 feet from the surface and in some cases more.

This well of Mr. Lough's is 130 feet deep, with 24-inch casing. The Niquette well, of practically the same depth and equipment, is at McCue, the first station east of Scott. Each of these wells, it is estimated, will irrigate 320 acres.

The United Well Works report that they have "put down some 20 irrigation wells here in western Kansas, of which a number are being successfully operated at the present time. The others are not yet outfitted with power. The prospect for the immediate future is very good."

In Sheridan, Sherman, Thomas, and Cheyenne, in the northwest; in Scott, in the central west; in Finney, Kearny, Hamilton, and Gray, through which courses the Arkansas River; in Meade, on the southern border; in Morton, in the extreme southwest corner, and in Stanton adjoining it on the north, are various irrigation projects, the water supply being artesian flow or from rivers, creeks, and wells.

The deeply driven upland wells, however, seem to promise by far the greatest possibilities, and these, with centrifugal pumps and powerful cheap-fuel engines, are helping to solve the problem of utilizing the underground waters to irrigate the high lands.

The developments and experiences of the past 18 months seem to demonstrate conclusively not only that the water is available in western Kansas in immense quantities from a sort of subterranean lake, as it were, but that it may be successfully and economically raised for irrigating quite extensive areas. As one westerner said: "It doesn't matter much what it costs to get the water up, if we can lift it in such quantities as we are now doing." And he was right, for its use is transforming land of otherwise questionable value for agriculture into most valuable tracts of great productiveness.

TABLE 1.—Climatological data for January, 1913. District No. 7, Lower Mississippi Valley.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.								Precipitation, in inches.								Sky.	Prevailing wind direction.	Observers.						
				Mean.				Departure from the normal.				Greatest daily range.				Total.				Greatest in 24 hours.				Total snowfall, unmeasured.				Number of rainy days, 0.01 inch or more.
				Highest.	Date.	Lowest.	Date.	Highest.	Date.	Lowest.	Date.	Greatest.	Date.	Highest.	Date.	Greatest.	Date.	Highest.	Date.	Greatest.	Date.	Highest.	Date.	Greatest.	Date.			
<i>Colorado.</i>																												
Buena Vista.	Chaffee.	7,955	13	12.0	-13.6	38	3	-37	6	41*	0.78	+ 0.53	0.50	12.0	4	17*	3*	6*	n.w.	C. A. Short.								
Calhan.	El Paso.	6,700	6	24.3	—	55	3	-28	6	40	0.25	—	0.15	3.0	2	27	3	1	sw.	H. B. Rice.								
Canon City.	Fremont.	5,343	25	32.6	-2.3	62	23	-21	6†	43	0.73	+ 0.35	0.60	11.5	3	25	3	3	n.	U. S. Weather Bureau.								
Colorado Springs.	El Paso.	6,098	33	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
Cripple Creek.	Teller.	9,396	12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
Cuchara Camps.	Huerfano.	8,200	4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
Eads.	Kiowa.	4,209	5	30.4	—	51	26	5	6	27*	T.	—	0.18	- 0.14	0.08	2.5	3	24	4	3	sw.	F. G. Willits.						
Fairview.	Custer.	9,500	4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
Fremont Exper. Sta.	El Paso.	8,850	3	21.8	—	47	14†	- 23	6	33	0.95	—	0.65	14.1	4	14	9	8	w.	C. A. Short.								
Garfield.	Chaffee.	9,510	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
Hamps.	Elbert.	5,400	20	24.0	- 3.8	57	3†	- 26	7	49	0.29	+ 0.07	0.29	3.7	2	20	4	7	n.w.	Lloyd N. Felton.								
Hermit Lake.	Custer.	10,000	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
Hoehne (near).	Las Animas.	5,700	21	31.5	0.0	65	27	- 18	6	59	0.41	+ 0.12	0.20	6.0	3	19	8	9	sw.	John E. Graham.								
Holly.	Prowers.	3,380	18	37.2	+ 4.8	68	29	- 12	8	50*	0.08	- 0.13	0.06	1.0	1	26	3	2	n.	S. W. De Busk.								
Lake Moraine.	El Paso.	10,265	19	18.2	- 4.0	44	25	- 24	7	41	0.48	- 0.30	0.21	8.0	4	14	12	5	sw.	Holly Sugar Co.								
Lamar.	Prowers.	3,592	23	29.8	- 1.7	66	29	- 13	7	46	0.40	+ 0.19	0.20	4.0	2	18	10	3	ne.	Clyde C. McReynolds.								
Las Animas.	Bent.	3,899	45	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—				
La Veta Pass.	Costilla.	9,000	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—				
Leadville.	Lake.	10,248	17	11.2	- 5.9	39	14	- 29	6	45	1.28	+ 0.14	0.38	16.2	8	15	7	9	n.	Clara M. Wright.								
Limon (near).	Elbert.	5,360	6	24.0	—	56	29	- 30	6	49	0.34	—	0.34	5.0	1	24	4	3	s.	U. S. Weather Bureau.								
Madrid.	Las Animas.	6,361	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—				
Marshall Pass.	Saguache.	10,846	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—				
Maxey.	Baca.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
Monument.	El Paso.	7,200	2	21.9	—	60	1	- 33	6	67*	0.96	—	0.58	11.3	4	22	4	2	w.	U. S. Forest Service.								
North Lake.	Las Animas.	8,700	21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—				
Pueblo.	Pueblo.	4,734	25	29.0	- 0.1	63	25	- 25	7	46	0.31	—	0.04	0.21	6.2	4	22	6	3	n.w.	James W. Ingmire.							
Rocky Ford (near).	Otero.	4,177	24	28.8	- 0.8	65	3†	- 20	7	50	0.17	—	0.11	0.17	2.5	1	27	1	3	w.	U. S. Weather Bureau.							
St. Elmo.	Chaffee.	9,500	4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—				
Salida.	—	7,035	14	23.8	- 5.1	52	28	- 30	7	46	0.80	+ 0.20	0.45	11.0	4	26	2	3	w.	Daniel Clark.								
Santa Clara.	Huerfano.	8,252	18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—				
Sheridan Lake.	Kiowa.	4,065	12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—				
Stonewall.	Las Animas.	8,000	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—				
Trinidad.	do.	5,994	18	31.7	- 3.2	61	3†	- 19	7	49	0.51	+ 0.02	0.40	6.5	4	17	9	5	w.	G. A. Storz.								
Two Buttes.	Baca.	4,100	3	31.6	—	66	29	- 12	6	51	0.35	—	0.18	3.5	5	16	8	7	sw.	Walter Dearden.								
Two Buttes Reservoir.	do.	4,250	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—				
Victor.	Teller.	10,100	8	19.0	—	44	3	- 14	5	36	0.11	—	0.10	3.0	2	22	6	3	w.	N. G. Jones.								
Villas.	Baca.	3,935	23	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—				
Wayne.	El Paso.	—	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—				
Westcliffe.	Custer.	7,864	20	20.4	- 5.2	50	28	- 32	7	50	0.45	—	0.14	0.45	8.0	1	14	10	7	sw.	Zack Jordan.							
Winfeld.	Chaffee.	9,765	4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—				
Woodman Sanatorium.	El Paso.	—	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—				
Wortman.	Lake.	11,250	13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—				
<i>New Mexico.</i>																												
Abbott.	Mora.	5,771	4	—	—	64	19	- 20	7†	—	0.05	—	0.02	0.8	3	19	9	3	s.	Agent E. P. & S. W. R. R.								
Albert.	Union.	4,700	23	31.6	- 6.5	68	21	- 6	8	49	—	—	0.29	—	0.15	5.5	4	8	20	3	n.w.	Martin De Smet.						
Aurora.	Colfax.	8,849	4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—				
Bell Ranch.	San Miguel.	4,500	14	30.8	- 7.4	69	3	- 20	8	55	0.31	+ 0.05	0.24	5.0	2	16	7	8	w.	C. M. O'Donel.								
Black Lake.	Colfax.	8,343	4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—				
Cabeza.	San Miguel.	5,406	4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—				
Campana.	do.	4,493	4	33.6	—	62	27	- 12	8	51	0.23	—	0.12	4.0	2	23	5	3	sw.	Alfred Lucero.								
Chacon.	Mora.	9,000	4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—				
Cimarron (near).	Colfax.	6,355	9	28.2	—	63	3	- 18	8	56	0.44	—	0.24	5.0	2	22	9	5	e.	William French.								
Cloris.	Curry.	4,129	2	35.0	—	67	28	- 4	8	50	0.21	—	0.20	3.5	2	28	0	3	sw.	John H. Barry.								
Cuervo.	Guadalupe.	4,849	4	34.2	—	53	19†	- 5	6	31	0.56	—	0.56	7.0	2	23	0	8	sw.	Agent E. P. & S. W. R. R.								
Dawson.	Colfax.	6,396	4	26.0	—	53	19†	- 14	7	51	0.25	—	0.20	4.2	4	13	16	2	n.w.	Do.								
Elizabethtown.	do.	8,465	8	15.4	—	48	3	- 35	7	65	0.43	—	0.30	8.5	3	20	6	5	w.	Miss M. Carrington.								
Folsom.	Union.	6,399	13	23.2	- 2.6	61	3	- 18	7	51	0.32	—	0.08	12.0	4	23	4	4	n.	Davis Rope.								
Fort Union.	Mora.	6,835	53	25.5	- 6.5	58	3	- 29	7	54	0.30	—	0.15	4.0	2	28	3	2	n.w.	M. C. Needham.								
Hayden.	Union.	4,444	3	33.5	—	64	3†	- 9	6	44	0.21	—	0.10	5.0	3	12	16	3	sw.	James B. Dickson.								
Hoosier Ranch.	Mora.	—																										

TABLE 1.—Climatological data for January, 1913. District No. 7—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.								Precipitation, in inches.								Sky.	Prevailing wind direction.	Observers.			
				Mean.	Departure from the normal.				Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.				Greatest in 24 hours.	Total snowfall, unmeasured.	Number of rainy days, 0.01 inch or more.				
					Highest.	Date.	Lowest.	Date.						Total.	Departure from the normal.	Greatest in 24 hours.	Total.								
Texas.																									
Amarillo.	Potter.	3,676	21	35.0	+ 1.1	67	29	- 2	7	38	0.11	- 0.49	0.09	1.1	3	21	10	0	sw.	U. S. Weather Bureau.					
Archer City.	Archer.	2									0.69		0.25	1.0	1	13	6	7	nw.	Charles H. Thuman.					
Arthur City.	Lamar.	590	21								1.50	- 1.11	0.60	0	4	9	0	22		C. A. Lowrey.					
Bonham.	Fannin.	566	10	43.6		70	4	- 8	8	31	4.85		1.86	0	6	16	3	12	sw.	H. M. Norman.					
Canadian.	Hemphill.	2,339	6								0.15		0.15	1.5	1	9	9	13	s.	J. M. Shaw.					
Childress.	Childress.	1,869	20								0.03	- 0.78	0.03	0.3	1	9	9	13	s.	George Baker.					
Chillicothe.	Hardeman.	1,406	5								0.53		0.22	2.0	3	3	3	3		A. B. Connor.					
Clarendon.	Donley.	2,719	S	36.6		70	3	- 1	8	51	0.00		0.00	0	0	11	13	7	sw.	Whitfield Carthart.					
Clarksville.	Red River.	442	13	44.4	+ 0.4	71	1†	12	8	43*	4.65	+ 1.93		0	5	13	3	15		J. W. O'Neill.					
Claude.	Armstrong.	3,397	8								0.06		0.06	T.	1					Ft. W. & D. C. Ry.					
Dalhart.	Dallam.	3,998	29.1			68	3	- 12	8	57	0.06		0.06	0.6	1					W. D. Griggs.					
Denison.	Grayson.	13									3.50	+ 1.72	0.90		11	12	0	19	n.	J. L. Wilson.					
Finley.	Bowie.	3									4.30		1.70	0	6	17	0	14	s.	Robert L. Smith.					
Henrietta.	Clay.	918	21	42.0	+ 0.3	78	1	5	8	60	0.57	- 0.32	0.52	1.0	4	13	1	17	n.	C. K. Brown.					
Memphis.	Hall.	2,067	8	44.8		69	17	10	8†	34	0.10		0.10	1	1	7	3	21	ne.	Ft. W. & D. C. Ry.					
Miami.	Roberts.	2,743	7	38.3		70	19	- 3	8	41	0.32		0.30	3.2	2	16	12	3	s.	J. E. Kinney.					
Ochiltree.	Ochiltree.	5									0.20		0.20	3.0	1					S. J. Allen.					
Panhandle.	Carson.	3,450	4																	J. Sid O'Keefe.					
Paris.	Lamar.	592	24	42.8	- 2.3	70	4	10	8†	38	6.02	+ 3.95	2.88	0.3	9	10	6	15	s.	Robert A. Miller.					
Plemons.	Hutchinson.	0	33.4			69	29	- 14	8	53	0.71		0.39	7.0	2	19	6	5	s.	C. S. Solomon.					
Quanah.	Hardeman.	1,963	11	41.2		79	28	4	8	46	0.30	- 0.29	0.30	0	1	18	2	11	s.	William H. Crawford.					
Kingo Crossing.	Hopkins.	3									5.46		2.60	0	8	12	3	6	nw.	H. J. Palmer.					
Romero.	Hartley.	3	33.5			67	29	- 15	8	46	0.45		0.45	4.5	1	18	4	9	n.	R. S. Chamberlain.					
Sherman.	Grayson.	745	20	44.2	- 0.1	70	17	11	8	29	3.35	+ 1.64	1.23	T.	7	13	2	16	n.	R. A. Gibbs.					
Stratford.	Sherman.	3,699	1	31.6		70	2	- 6	7	46	0.40		0.30	4.0	2	19	5	7	n.	J. W. Elliott.					
Tulia.	Swisher.	3,501	15	36.1	- 0.9	68	3	- 10	8	48	0.40	- 0.30	0.20	3.0	3	12	16	3	s.	Lou Mulhall.					
Wellington.	Collingsworth.	1									0.10		0.10	1.0	1					J. D. Camp.					
Wichita Falls.	Wichita.	953	21								4.69		2.20	0	6	8	14	9	sw.	E. F. Mittman.					
Winfield.	Titus.	3																		J. B. Newberry.					
Kansas.																									
Alden.	Rice.	1,684	3								0.28		0.14	5.0	2	18	7	6	s.	Geo. Klady.					
Anthony.	Harper.	1,329	16	33.6		68	17†	- 12	8	39	0.20	- 0.42	0.15	1.5	1	14	11	6	sw.	R. H. Beebe.					
Ashland.	Clark.	1,951	25	31.2	- 2.1	72	29	- 16	8	51	0.27	- 0.24	0.15	2.5	4	14	12	5	s.	C. W. Carson.					
Burlington.	Coffey.	1,010	20	30.8	- 0.6	62	29	- 3	9†	43	0.51	- 0.51	0.24	3.5	3	1	22	8	nw.	O. E. Sanford.					
Chanute.	Neosho.	940	9	32.6		69	17	- 3	8	33	1.18		0.42	1.5	6	6	17	8	s.	C. W. Brown.					
Cimarron.	Gray.	2,700	1	26.2		70	29	- 18	8	54	0.40		0.30	4.0	2	18	0	5	s.	C. C. Isely.					
Coldwater.	Coffeyville.	747	3			68	17†				1.16		0.38	1.0	6	11	4	16	s.	A. F. Briggs.					
Comanche.	Montgomery.	2,090	16	32.6	- 0.4	69	29	- 15	8	44	0.10	- 0.63	0.05	2.0	2	19	6	6	s.	J. L. Stanley.					
Coolidge.	Comanche.	898	23	34.4	+ 1.3	67	19	- 2	8	40	2.08	+ 0.13	0.97	1.2	7	16	5	10	sw.	O. E. Skinner.					
Cottonwood Falls.	Hamilton.	3,348	16	27.1	- 2.5	69	3	- 19	8	60	0.20	- 0.02	0.20	2.0	1	18	7	6	nw.	W. R. Padley.					
Council Grove.	Chase.	1,234	9	30.6		64	29	- 18	8	43	0.15		0.10	1.5	2	15	9	7	n.	E. B. Greene.					
Cunningham.	Morris.	1,234	4			65	29	- 19	8	42	0.09		0.03	5.0	3	13	14	4	s.	J. P. Blackledge.					
Dodge City.	Kingman.	1,680	29	31.3	- 1.3	70	3	- 16	8	45	0.30	- 0.36	0.30	3.0	1	16	10	5	s.	W. H. Morton.					
El Dorado.	Ford.	2,513	39	29.4	+ 2.1	69	29	- 14	8	44	0.28	- 0.19	0.21	5.0	3	16	9	6	s.	U. S. Weather Bureau.					
Ellinwood.	Butler.	1,291	11	31.5		62	29	- 15	8	37	0.29		1.3	1.8	2	22	3	6	s.	W. Y. Miller.					
Emporia.	Barton.	1,790	38	30.4	- 0.2	69	29	- 25	8	48	0.26	- 0.50	0.19	4.5	2	9	17	5	s.	Martin Musil.					
Eureka.	Lyon.	1,138	32	30.9	+ 2.6	64	29	- 10	8	38	0.37	- 0.31	0.25	5.0	2	15	9	7	sw.	W. H. Boyles.					
Fall River.	Greenwood.	1,079	17			66	29	- 10	8	40	0.53	- 0.42	0.50	3.0	3	16	7	8	nw.	Mrs. T. C. Peffer.					
Fargo.	do.	925	17	33.0	- 0.9	65	19†	- 10	8	40	0.65	- 0.36	0.35	1.0	5	20	5	10	s.	J. McDaniel.					
Frederia.	Seward.	3									0.40		0.30	4.0	2	23	5	3	s.	N. B. Swink.					
Garden City.	Wilson.	975	10	33.6		66	17†	- 5	8	40	0.74		0.26	1.0	7	19	3	9	s.	B. W. Holmes.					
Great Bend.	Finney.	2,836	24	28.8	- 1.8	68	29	- 18	8	52	0.15	- 0.17	0.15	2.0	1	22	3	6	s.	B. F. Stocks.					
Greensburg.	Barton.	1,850	4			66	29	- 16	8	46	0.32	+ 0.06	0.20	3.2	3	18	7	6	n.	I. Pritchard.					
Grenola.	Klowa.	2,235	6	32.0		66	29	- 10	8	42	0.20	- 0.10	0.10	1.0	1	23	3	5	n.	C. C. Raymond.					
Hess.	Elk.	1,118	25	32.9	+ 0.7	66	29	- 18	8	40	0.73	- 0.50	0.31	1.5	4	13	12	6	sw.	W. H. Lawyer.					
Howard.	Elk.	1,112	6	32.4		65	29	- 8	8	36	0.73		0.35	1.0	4	20	3	8	n.	Harry Jaques.					
Hutchinson.	Reno.	1,535	23	29.6	+ 1.5	62	25	- 20	7	38	0.75	+ 0.15	0.75	5.0	1	18	4	9	n.	J. W. Eby.					
Independence.	Montgomery.	800	39	35.2	- 0.4	65	19	- 5	8	39	0.25	- 0.31	0.31	1.1	8	16	5	10	s.	Sheridan Plough.					
Iola.	Allen.	984	7	30.6	+ 3.0	63	19	- 3	8	37	0.85	- 0.13	0.32	1.0	2	17	9	9	s.	F. L. Kenoyer.					
Irene.	Hamilton.	3,440	3	28.8		68	29	- 17	8	56	0.15		0.10	1.5	2	17	9	5	s.	U. S. Weather Bureau.					
Jetmore.	Hodgeman.	2,268	12	28.8	- 1.8	70	29	- 14	8	54	0.16	- 0.16	0.12	7.0	3	14	11	6	sw.	N. M. Herbig.					
Kingman.	Kingman.	1,504	5	32.0		64	29†	- 17	8	41	0.54		0.54	7.0	1	14	13	4	nw.	James Aikin.					
La Crosse.	Rush.	2,061	11			70	29	- 19	8	45	0.08	- 0.15	0.08	1.0	1	14	8	6	s.	B. B. Anawalt.					
Lakin.	Kearney.	2,993	23	28.4	- 1.8	67	29	- 10	8	51	0.17	- 0.10	0.17	2.0	2	22	3	6	sw.	Rodney Torrey.					
Larned.	Pawnee.	2,090	28	29.9		62	29	- 16	8	46	0.32	+ 0.06	0.20	3.2	3	18	7	6	n.	C. H. Longstreth.					
Lebo.	Coffey.	1,138	27	28.8	- 0.2	62	29	- 11	8	38	0.46	- 0.66	0.25	3.5	4	15	10	6	s.	H. H. Wolcott.					
Le Roy.	do.	990																							

TABLE 1.—Climatological data for January, 1913. District No. 7—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.						Sky.	Prevailing wind direction.	Observers.			
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of rainy days, 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.			
<i>Oklahoma.</i>																					
Ada.	Pontotoc.	1,001	5	40.5	.....	73	17	3	8	38	1.87	.....	0.77	1.0	8	15	12	4	n.	W. S. Creveling.
Alva.	Woods.	1,350	8	35.2	.....	72	29	- 12	8	44	0.20	.....	0.10	1.5	3	15	12	4	u.	S. A. Stech.
Apache.	Caddo.	1,255	3	38.2	.....	73	17	- 2	8	39	0.60	.....	0.37	0.5	4	20	4	7	n.	G. D. Teeter.
Arapaho.	Custer.	1,575	19	37.2	+ 1.0	71	17	- 3	8	45	T.	- 0.93	T.	0	19	4	8	s.	J. C. Brower.		
Ardmore.	Carter.	872	11	42.0	- 0.3	74	17	- 4	8	38	1.94	+ 0.57	0.94	0	5	12	7	12	s.	H. T. Nisbett.	
Bartlesville.	Washington.	687	5	36.9	.....	73	19	- 2	8	34	1.23	.....	0.30	2.0	6	14	7	10	n.w.	Dr. A. P. Owens.
Beaver.	Beaver.	2,500	16	33.8	+ 0.6	67	29	- 19	8	44	0.40	- 0.20	0.20	4.0	3	23	1	7	u.	W. C. Frazer.	
Blackburn.	Pawnee.	800	11	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Mrs. Bertha Parks.	
Cache.	Comanche.	1,380	7	37.8 ^e	.....	71	.....	- 2	8	44	0.60	.....	0.60	0	1	14	6	6	n.	Mrs. Frank Rush.
Calvin.	Hughes.	713	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Thomas Purcell.	
Chandler.	Lincoln.	865	11	39.6 ^f	+ 0.8	73	.....	3	8	42	0.92	- 0.26	0.82	0	2	10	5	10	s.	Chas. L. Kern.
Chattanooga.	Comanche.	1,150	7	38.8	.....	72	17	- 1	8	46	0.66	.....	0.31	0	3	14	5	12	se.	Squire Humble.
Chickasha.	Grady.	1,091	11	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. C. Good.	
Cloud Chief.	Washita.	1,400	11	38.1	- 2.3	72	17	- 5	8	42	0.14	- 0.36	0.09	0.9	2	14	11	6	s.	J. P. Stutzman.	
Crawford.	Roger Mills.	643	11	40.7	- 1.0	71	17	7	8	37	4.20	+ 2.76	1.73	T.	8	15	8	3	n.	W. W. Blackburn.	
Durant.	Bryan.	1,456	6	39.8	.....	75	17	0	8	46	0.26	.....	0.11	T.	3	17	11	3	n.	Nelson Houk.
Eldorado.	Jackson.	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	T. W. Lanham.	
Elk City.	Beckham.	Canadian.	1,400	21	38.4	+ 2.0	70	1	8	38 ^b	0.46	- 0.74	0.22	0.6	4	19 ^b	1	9 ^b	n.	R. J. Carlile.
El Reno.	Garfield.	1,269	11	34.4	- 1.6	70	17	- 5	8	41	0.42	- 1.06	0.15	1.5	5	16	10	5	n.	Rose E. Walker.	
Erick.	Beckham.	2,058	8	37.9	.....	71	.....	- 4	8	49 ^c	0.12	.....	0.06	T.	2	16 ^a	4 ^a	4 ^a	s.	A. W. Hanes.
Eufaula.	McIntosh.	566	42.1	.....	.....	71	.....	0	8	39 ^b	3.40	.....	1.06	0	7	14 ^b	11 ^b	12	s.	R. Uhl Brown.
Fairland.	Ottawa.	839	13	38.2	+ 0.3	70	17	0	8	40	2.84	+ 0.92	1.05	1.0	9	13	6	12	s.	C. W. Prier.	
Fort Gibson.	Muskogee.	556	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	John T. Welsh.	
Frederick.	Tillman.	1,293	6	40.2	.....	75	17	- 1	8	39	0.56	.....	0.30	0.5	4	17	4	10	se.	B. B. Bradley.
Geary.	Blaine.	1,546	1	37.5	.....	70	17	0	8	40	0.33	.....	0.11	0.8	1	15	8	8	sw.	O. P. Ruth.
Goodwell.	Texas.	3,300	2	34.8	.....	67	3 ^f	- 10	8	50	0.45	.....	0.40	4.5	2	23	0	8	s.	S. W. Black.
Guthrie.	Logan.	1,000	20	38.1	+ 0.2	73	17	- 5	8	40	0.90	- 0.21	0.30	T.	3	18	2	11	s.	S. E. Snyder.	
Guymon.	Texas.	3,133	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. L. Mordt.	
Hartshorne.	Pittsburg.	700	14	43.4	+ 1.0	67	5 ^f	- 5	8	40	4.72	+ 2.99	2.00	0.2	5	18	2	11	n.	Frank Webber.	
Healdton.	Carter.	900	19	40.6	- 0.9	75	18	0	8	50	1.54	- 0.01	0.97	T.	3	10	14	7	n.	C. H. Heald.	
Helena.	Alfalfa.	1,396	5	35.5	.....	70	29	- 7	8	41	0.05	.....	0.05	0.5	1	15	10	6	s.	J. G. McCall.
Hennessey.	Kingfisher.	1,186	18	39.6	+ 1.4	72	17	- 4	7 ^f	44	0.55	- 0.55	0.38	1.0	3	14	3	14	s.	Mrs. M. C. Parks.	
Hobart.	Kiowa.	1,396	10	39.0	.....	72	17	- 2	8	41	0.32	.....	0.12	0.6	4	10	14	7	s.	J. M. Pate.
Holdenville.	Hughes.	900	12	40.2	+ 0.1	72	17	- 4	8	37	2.06	+ 0.20	0.83	T.	5	15	8	8	n.	Eula L. Rutherford.	
Hooker.	Texas.	3,038	7	31.6	.....	70	29	- 18	7	53	0.30	.....	0.20	3.0	2	14	2	15	n.	H. N. Kelly.
Hugo.	Choctaw.	424	4	.....	.....	68	4	10	8	34	5.83	.....	2.74	T.	6	17	5	9	n.	G. C. Montgomery.
Hurley.	Cimarron.	4,200	5	33.8	.....	68	29	- 15	8	53	0.60	.....	0.40	6.0	2	5	21	5	sw.	Dr. C. W. Meyers.
Idabel.	McCurtaun.	474	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	M. L. Henderson.	
Jefferson.	Grant.	1,062	19	33.1	- 2.2	70	29	- 16	8	42	0.50	- 0.40	0.34	2.0	2	20	2	9	s.	T. E. Beck.	
Kenton.	Cimarron.	4,000	12	33.3	- 2.8	68	3	- 14	8	52	0.50	+ 0.25	0.20	5.0	4	18	6	7	sw.	Wm. H. Guy.	
Kingfisher.	Kingfisher.	1,046	16	38.1	- 0.6	72	17	- 6	8	42	0.55	- 0.49	0.29	0.5	6	14	11	6	s.	J. C. Cross.	
Lawton.	Comanche.	1,111	33	39.9	.....	73	17	0	7	40	1.07	.....	0.57	0.5	4	16	6	9	s.	F. C. Davis.
Lawtonka Lake.	do.	do.	do.	do.	do.	do.	do.	do.	do.	do.	do.	do.	do.	do.	do.	do.	do.	do.	W. F. Stuart.		
McAlester.	Pittsburg.	698	16	43.0	.....	72	17	5	8	37	3.75	+ 1.62	1.28	1.0	8	12	3	16	s.	Wm. Noble.
Mangum.	Greer.	1,555	20	37.8	- 2.9	74	1	8	8	38 ^b	0.03	- 0.86	0.03	T.	1	19 ^b	6 ^b	5 ^b	se.	F. D. Dodson.	
Marlow.	Stephens.	1,292	12	40.1	+ 0.2	72	17	- 2	8	49	1.75	+ 0.78	1.10	T.	3	19	4	8	n.	Wm. B. Anthony.	
May.	Harper.	1	35.0	.....	.....	.....	.....	.....	8	66	0.20	.....	0.20	2.0	1	24	0	7	n.	G. C. Gray.
Meeker.	Lincoln.	1,030	19	36.4	- 1.4	69	29	- 4	7	44	1.90	+ 0.31	0.90	6.0	3	21	5	5	n.	Dr. J. H. Baugh.	
Muskogee(1).	Muskogee.	617	35	38.0	.....	72	18	6	8	22	.....	.....	0.82	2.0	10	16	3	12	n.	U. S. Weather Bureau.
Muskogee(2).	do.	614	14	40.0	+ 0.8	71	17	5	8	35	2.50	+ 0.94	1.22	0.5	6	18	0	13	n.	J. Harry Randall.	
Mutual.	Woodward.	5	35.0	.....	.....	70	17	- 12	8	49	0.00	.....	0.00	0	0	18	7	6	s.	Thomas Martin.
Neola.	Caddo.	1,500	7	38.8	.....	72	17	- 0	8	40	0.46	.....	0.33	0.2	3	13	12	6	n.	R. N. Schooling.
Newkirk.	Kay.	1,149	15	36.0	+ 0.2	66	29	- 9	8	36	0.43	- 0.96	0.25	2.5	4	17	7	7	s.	P. H. Albright & Co.	
Norman.	Cleveland.	1,171	18	37.7	- 1.1	72	17	- 2	8	36	1.11	+ 0.05	0.41	1.0	4	14	8	9	n.	S. E. Boyd.	
North Muskogee.	Muskogee.	do.	do.	do.	do.	do.	do.	do.	do.	do.	do.	do.	do.	1.35	1.0	7	17	1	13	n.	J. E. Walker.
Oakwood.	Dewey.	1,854	3	.....	.....	.....	.....	.....	8	40	0.28	.....	0.17	1.0	3	18	8	5	n.	Dr. F. P. Osborn.
Okeene.	Blaine.	1,194	8	37.2	.....	72	17	- 9	8	40	0.28	.....	0.17	1.0	3	18	8	5	n.	Dr. L. H. Murdoch.
Okemah.	Oktuskee.	1	41.0	.....	.....	72	20	2	8	47	1.65	.....	1.00	0	3	14	4	13	s.	S. F. Smith.
Oklahoma.	Oklahoma.	1,247	23	37.0	+ 2.3	71	17	2	8	44	0.56	- 0.78	0.34	0.9	5	14	7	10	s.	U. S. Weather Bureau.	
Okmulgee.	Okmulgee.	752	6	42.6	.....	77	19	1	8	44	2.40	.....	1.25	2.5	3	14	8	9	s.	J. L. Maynard.
Pauls Valley.	Garvin.	880	12	40.3	- 1.1	73	17	- 1	8	41	1.80	+ 0.74	0.85	0	4	21	7	3	s.	A. M. Foss.	
Pawhuska.	Osage.	918	12	38.5	+ 0.6	72	17	- 5	12	43	1.69	+ 0.19	0.73	1.2	5	18	6	7	n.	R. C. Block.	
Perry.	Noble.	920	14	37.4	+ 0.1	70	17	- 5	8	36	0.02	- 0.41	0.30	1.0	6	20	5	6	s.	S. E. Laird.	
Rankin.	Rogers Mills.	2,200	9	35.7	.....	68	29	- 6	8	43	0.19	.....	0.10	0.5	3	19	7	5	sw.	Roy Kagay.
Ravia.	Johnston.	796	10	44.4	.....	74	17	- 4	8	51	3.01	.....	1.10	0	6	20	0	11	nw.	R. G. Guptill.
Sac and Fox Agency.	Lincoln.	900	19																		

TABLE 1.—Climatological data for January, 1913. District No. 7—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.						Sky.	Prevailing wind direction.	Observers.		
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmeasured.	Number of rainy days, 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
Missouri—Continued.																				
Joplin.....	Jasper.....	979	36	37.0	+ 0.7	69	18†	2	8	47	3.20	+ 1.04	1.50	1.0	5	15 ^a	3 ^a	12 ^a	n.	Joplin High School.
Koshkonong.....	Oregon.....	911	13	38.6	- 1.9	67	19	11	12	36	8.34	+ 5.43	2.45	T.	12	10 ^b	5 ^b	14 ^b	sw.	J. W. Hitt.
Lamar.....	Barton.....	964	33	33.2	+ 0.5	68	19	2	8†	41	1.94	+ 0.24	0.79	1.0	5	14	4	13	sw.	E. H. Adams.
Marble Hill.....	Bollinger.....	420	22	40.4 ⁱ	+ 6.3	74	18	15	12†	40	11.70	+ 8.46	2.00	0	10	11	13	7	s.	A. F. Hendrix.
Mountaintrove.....	Wright.....	1,490	15	37.0	+ 3.3	63	4	5	12	40	5.22	+ 2.77	1.35	0.5	10	12	5	14	nw.	Mo. Fruit Exp. Sta.
Mount Vernon.....	Lawrence.....	1,480	35	33.5 ⁱ	- 1.3	69	19	4	8	40	3.70	+ 1.50	2.30	1.0	6	14 ^f	1 ^f	10 ^f	nw.	J. R. White & Son.
Neosho.....	Newton.....	1,023	31	37.6	+ 2.5	70	19	1	8	42	4.18	+ 1.82	2.20	1.2	8	15 ^a	2 ^a	13 ^a	nw.	W. O. Buck.
New Madrid.....	New Madrid.....	285	20	34.6	+ 2.4	68	19	5	12	38	4.59	+ 2.20	1.36	1.0	9	6	7	18	s.	Miss Josie Smith.
Oakfield.....	Franklin.....	793	22	34.6	+ 2.4	68	19	5	12	40	7.75	+ 4.81	2.20	0	7	11	4	16	nw.	E. E. Steines.
Olden.....	Howell.....	1,246	24	37.4	+ 2.0	66	19	5	12	42	4.37	+ 2.06	1.82	2.0	10	14	3	14	nw.	J. D. Evans.
Rolla.....	Phelps.....	1,139	32	34.8	+ 4.0	67	19	5	12	42	3.40	+ 0.74	1.89	0.8	9	11	8	12	s.	Prof. P. J. Wilkins.
Springfield.....	Greene.....	1,350	26	34.2	+ 2.9	68	19	5	12	42										U. S. Weather Bureau.
Kentucky.																				
Blandville.....	Ballard.....	445	32	40.6	+ 7.2	67	5	16	12	35	12.47	+ 8.06	2.61	T.	11	9	4	18	se.	E. W. Horr.
Tennessee.																				
Arlington.....	Shelby.....	31	43.9	+ 5.5	69	5†	22	3	40	11.30	+ 6.03	2.25	0	14	7	2	22	n.	A. Thomas B. Etheridge.	
Bolivar.....	Hardeeman.....	450	30	43.9	+ 5.5	69	5†	70	22	9	10.99		3.23	0	18	9	2	20	s.	Miss Mary A. Smith.
Brownsville.....	Haywood.....	361	31	43.8	+ 5.5	68	5†	21	9†	33	8.35	+ 3.85	2.10	0	12	12	1	18	s.	Miss Hattie N. Moses.
Covington.....	Tipton.....	311	30	44.2	+ 4.7	67	5	22	3	40	11.50	+ 6.92	3.00	0	12	15	1	15	se.	James R. Ruffin.
Dyersburg.....	Dyer.....	310	30	44.5	+ 7.0	70	5†	22	3	40	10.49	+ 6.37	0							Miss Martha A. Sinclair.
Jackson.....	Madison.....	450	23	47.8 ^k	+ 7.3	72	17	23	14	46 ^k	10.49									Shelby A. Roberts.
Kenton.....	Obion.....	325	11	42.8	+ 3.5	68	5	21	8†	37	13.30	+ 9.50	4.28	T.	12	11	4	16	n.	George S. Martin.
Memphis.....	Shelby.....	409	42	46.0	+ 5.7	70	5	21	8	35	7.71	+ 2.50	2.20	0	13	9	5	17	s.	U. S. Weather Bureau.
Milan.....	Gibson.....	440	31	41.8	+ 5.9	67	5†	21	9	39	11.31	+ 6.28	3.30	0	15	5	4	22	s.	Orlando F. Cantwell.
Trenton.....	do.....	345	33	43.9	+ 5.9	68	20†	22	8†	37	5.73	3.83	0	11	12	3	16	se.	F. L. Dennison.	
Union City.....	Obion.....	360	18	42.6	+ 3.0	68	5	21	8	33	16.16	+ 11.31	4.57	T.	10	11	7	13	s.	J. B. Kimzey.
Arkansas.																				
Alicia.....	Lawrence.....	9	42.5	.....	65	6†	18	8	34	7.80	.....	2.05	0	7	7	11	13	sw.	McCullough & Guelek.	
Amity.....	Clark.....	250	21	45.0	+ 2.9	69	16	13	8	39	7.70	+ 3.02	2.65	0	7	13	10	8	e.	J. W. Campbell.
Arkadelphia (near).....	do.....	250	6	46.6	.....	69	4†	15	8	40	7.02	.....	1.95	0	9	16	4	11	sw.	J. A. Ross.
Arkansas City.....	Desa.....	145	30	.....	.....	.....	.....	.....	.....	.....	10.16	+ 5.51	2.70	0	10	13	13	13		W. C. Blundell.
Batesville.....	Independence.....	271	8	.....	.....	.....	.....	.....	.....	9.60	.....	1.86	0	13	13	13	13		Leila I. Teter.	
Bee Branch.....	Van Buren.....	21	42.0	+ 0.9	67	19	13	8	35	12.10	+ 7.58	5.70	0	8	8	13	13		P. B. Jackson.	
Benton.....	Saline.....	283	6	44.0	.....	69	19	8	40	11.29	.....	2.85	0	8	8	13	13		John T. Maxey.	
Bentonville.....	Benton.....	1,303	37.4	+ 3.3	67	19	4	8	43	3.42	+ 0.79	1.19	1.3	9	16	5	10	s.	U. S. Weather Bureau.	
Bergman.....	Boone.....	1,324	16	38.7	+ 6.0	68	19	7	8	38	4.77	+ 2.21	2.27	0.5	6	15	5	11	nw.	S. J. Howe.
Black Rock.....	Lawrence.....	259	9	46.9	.....	70	4†	16	8	33	12.42	+ 7.49	4.31	0	12	12	12	12		H. L. D. Whitson.
Brinkley.....	Monroe.....	226	27	46.8	+ 5.5	71	5	19	8	33	6.58	.....	2.50	0	9	9	9	9		W. H. Stoner.
Calico Rock.....	Izard.....	361	9	.....	.....	74	5†	15	8	46	5.55	+ 0.07	1.44	0	12	12	12	12		R. K. Quarterman.
Camden.....	Ouachita.....	158	28	48.4	+ 5.4	74	5†	15	8	46	5.55	.....	3.10	0	7	12	5	14		J. M. Huddleston.
Centerpoint.....	Howard.....	470	13	46.4	+ 0.8	70	4†	13	8	38	9.67	+ 6.64	8.48	0	15	15	15	15		Mrs. B. E. Bishop.
Clarendon.....	Monroe.....	171	9	.....	.....	70	5	19	8	38	10.71	.....	4.75	0	11	11	11	11		G. H. Burr.
Conway.....	Faulkner.....	309	30	43.5	+ 4.3	69	19	14	8	36	14.92	+ 10.58	5.44	0	10	10	10	10		Jacob Brobst.
Corning.....	Clay.....	293	21	41.5	.....	70	19	13	8†	44	7.14	+ 4.25	3.00	0	8	8	8	8		A. Bernard.
Dardanelle.....	Yell.....	330	27	41.5	.....	72	5	19	8	47 ^a	7.50	+ 4.63	3.20	1.0	7	10	10	10		Neal Dodd.
Dardanelle.....	Marion.....	1,175	32	38.5	+ 3.4	70	27	8	7	47 ^a	9.00	.....	2.50	0	10	13	14	14		Lawrence Waterman.
Dumas.....	Desa.....	1	.....	.....	.....	66	19	4	8	37	6.21	.....	1.93	T.	8	14	5	12	n.	J. M. Ricketts.
Dutton.....	Madison.....	11	37.6	.....	66	19	4	8	37	6.21	.....	1.80	0	14	14	14	14		Jeff J. Babb.	
Dillard.....	Union.....	265	9	48.3	.....	75	5	18	8	41	6.19	.....	2.10	T.	13	13	13	13		J. C. Chenault.
England.....	Lonoake.....	7	46.9	.....	70	4†	16	8	37	9.01	.....	1.09	0	9	11	6	14		George W. Nichols.	
Eureka Springs.....	Carroll.....	1,485	11	40.6	+ 2.9	74	19	4	8	49	5.02	+ 2.21	1.09	2.0	10	15	7	9	sw.	University of Arkansas.
Fayetteville.....	Washington.....	1,451	24	40.2	+ 4.8	67	19	3	8	41	5.22	+ 2.50	1.15	2.0	9	11	10	10	s.	J. B. Atkinson.
Fordyce.....	Dallas.....	1	47.6	.....	72	5	16	8	36	4.77	.....	1.00	0	9	11	10	10		U. S. Weather Bureau.	
Fort Smith.....	Sebastian.....	481	31	41.0	+ 2.7	69	19	10	8	36	5.29	+ 2.78	2.28	0.1	9	13	4	14	e.	R. E. Brown.
Fraziers Turnpike.....	Futaski.....	1	.....	.....	.....	69	19	10	8	36	8.98	.....	2.00	0	7	8	3	20	sw.	B. C. Logan.
Fulton.....	Hempstead.....	264	9	.....	.....	69	19	8	8	36	6.89	.....	1.62	0	10	10	10	10		Wm. N. Harris.
Georgetown.....	White.....	643	15	40.0	+ 1.3	67	19	13	8	36	10.84	+ 6.88	1.85	0	11	7	6	18	sw.	C. A. Caywood.
Hardy.....	Sharp.....	182	28	45.2	+ 3.9	72	1	24	8†	40	7.83	+ 2.00	1.65	0	16	16	5	6	se.	J. B. McLeod.
Helena.....	Garland.....	600	21	46.8	+ 4.0	69	19	9	3	40	10.85	+ 6.04	3.40	0	8	20	5	6		Army and Navy Gen. Hos.
Huttig.....	Union.....	85	6	52.0	.....	75	6	21	8	43 ^a	8.13	.....	2.04	0	14	14	14	14		C. A. Berry.
Jonesboro.....	Craighead.....	345	18	42.8	+ 2.4	67	5	20	7†	35	7.64	+ 1.48	1.40	0	11	7	12	12	se.	Benedictine Sisters.
Junction.....	Union.....	20	20	50.5	+ 6.5	75	5	19	8	32	4.63	+ 1.50	1.60	0	6	11	6	14	n.	J. A. Lowderback.
Lake Farm.....	Jefferson.....	195	6	48.2	.....	70	5†	19	9	38	6.83	.....	1.20	0	13	13	13	1		

TABLE 1.—Climatological data for January, 1913. District No. 7—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.								Precipitation, in inches.								Sky.	Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmetted.	Number of rainy days, 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.				
<i>Mississippi.</i>																						
Anguilla.	Sharkey.	107	5	52.8		75	11	25	8†	42	9.80		3.00	0	14	11	0	20	sw.	E. W. Cook.		
Austin.	Tunica.	200	17	47.7	+ 4.3	73	5	23	13	37	9.54	+ 3.57	2.54	0	15	12	4	15	s.	H. J. Irvine.		
Batesville.	Panola.	230	26	48.7	+ 5.0	74	5	25	9†	40	12.16	+ 7.39	2.02	0	13	10	1	20	sw.	J. M. Cox.		
Big Creek.	Calhoun.	2																			J. P. Havens.	
Canton.	Madison.	228	23	54.7	+ 8.3	75	5†	28	8†	33	6.58	+ 1.24	1.85	0	14	7	10	14	se.	Dr. G. W. Smith-Vaniz.		
Charleston.	Tallahatchie.	3	3	53.0		78	6	22	13	45	10.83		1.30	0	13	14	2	17	se.	W. B. Burke.		
Clarksdale.	Coahoma.	177	6	47.3		73	5	24	8†	39	8.43		1.62	0	16	7	3	21	s.	A. C. Tuttle.		
Cleveland.	Bolivar.	160	1										2.45		0	17	10	0		w.	W. W. Boone.	
Coffeeville.	Yalobusha.	241	4										1.74	0	2	13	11	7	s.	C. K. Bailey.		
Corinth.	Alcorn.	470	25	45.9	+ 5.6	70	7	24	13	38	13.07	+ 8.90	2.94	0	17	8	1	22	se.	M. A. Candler.		
Crenshaw.	Panola.	187	4										1.40		0	9	6	8	17	s.	Rodgers Woolard.	
Duck Hill.	Montgomery.	14	51.4	+ 7.5	75	7†	25	9†	38					0	12	8	5	18	s.	W. H. Eskridge.		
Edwards.	Hinds.	222	26	54.4	+ 6.7	76	7†	27	8	33	7.70	+ 2.36	1.35	0	16	8	5	15	s.	E. F. Farr.		
Fayette.	Jefferson.	270	12	55.6	+ 7.3	76	6	28	8†	36	7.14	+ 1.52	3.08	0	8	5	14	12	s.	T. L. Darden.		
Greenville.	Washington.	126	26	49.2	+ 4.0	74	5	24	14	37	10.37	+ 5.71	2.26	0	13	10	1	20	s.	M. G. Harbison.		
Greenwood.	Leflore.	140	13	49.9	+ 3.9	76	11	26	9	39	10.80	+ 5.93	2.86	0	15	8	3	20	s.	J. H. Stephen.		
Grenada.	Grenada.	194	4																	e.	E. A. Jones.	
Hernando.	De Soto.	391	25	46.4	+ 4.6	70	11†	22	8†	40	5.51	+ 1.98	1.10	0	12	7	5	19	s.	W. F. Wood.		
Hickory Flat.	Benton.	435	4										15.06		0	14	6	14	11	s.	H. Powell.	
Holly Springs.	Marshall.	600	26	44.9	+ 4.0	70	11	23	9	37	10.59	+ 5.94	2.06	T.	16	6	5	21	se.	L. B. Mosby.		
Kosciusko.	Attala.	430	23	50.1	+ 4.8	74	7	24	14	37	8.97	+ 3.99	2.00	0	13	11	4	16	se.	E. L. Lucas.		
Malone.	Marshall.	4											12.01		0	15				w.	M. J. Wilkins.	
Marks.	Quitman.	163	4																		T. P. Banister.	
Natchez.	Adams.	206	25	51.8	+ 2.0	75	6	27	8	30	5.67	+ 0.42	2.30	0	8	10	0	21	s.	F. L. Garrity.		
New Albany.	Union.	398	4																		H. Marshall.	
Pontotoc.	Pontotoc.	475	24	48.6	+ 5.3	74	7	21	8	35	9.41	+ 4.53	1.60	0	10	5	15	11	nw.	Dr. C. W. Bolton.		
Port Gibson.	Claiborne.	116	25	53.0	+ 4.8	78	7	27	28	41	7.16	+ 1.90	2.20	0	10	6	3	22	s.	H. H. Crisler.		
Rosedale.	Bolivar.	143	5	47.6		80	5	23	13	45	9.80		1.85	0	14	6	4	21	sw.	T. J. Murray.		
Senatobia.	Tate.	284	4																		C. Brickell.	
Shoaloe.	Madison.	10	54.6	+ 6.0	75	12	28	9	35	7.07	+ 2.76	1.45	0	10	12	5	14	s.	J. C. Pitchford.			
Suffolk.	Franklin.	12	56.2	+ 6.1	76	7	29	8†	32	9.46	+ 5.35	2.93	0	13	8	3	15	nw.	Prof. Geo. H. Kent.			
Swan Lake.	Tallahatchie.	148	8										10.96		0	12	10	4	17	s.	Dr. S. D. Robinson.	
Tchula.	Holmes.	130	8	53.1		75	12	27	8†	35	9.56		2.15	0	12	3	15	13	s.	Dr. M. P. Winkler.		
University.	Lafayette.	502	20	48.0	+ 5.0	70	11†	23	9	33	16.15	+ 11.33	3.30	0	14	12	4	15	s.	Prof. J. H. Dorroh.		
Utica.	Hinds.	287	9	55.0		77	6	29	8†	35	7.59		2.84	0	14	7	3	21	s.	Dr. J. B. Dudley.		
Vicksburg.	Warren.	247	42	53.7	+ 6.7	75	5	27	8	42	7.00	+ 1.33	2.32	0	16	8	3	20	s.	U. S. Weather Bureau.		
Water Valley.	Yalobusha.	300	24	49.1	+ 5.6	73	11	20	9	36	12.91	+ 7.58	3.50	0	13	10	6	15	se.	Miss Loula Erikson.		
Woodville.	Wilkinson.	580	20	56.1	+ 6.0	77	6	27	8	33	11.79	+ 6.25	4.85	0	14	14	3	16	sw.	James E. Lee.		
Yazoo City.	Yazoo.	116	19	51.5	+ 5.3	75	5†	24	8	35	8.15	+ 3.07	2.28	0	11	10	5	16	s.	W. H. Courts.		
<i>Louisiana.</i>																						
Abbeville.	Vermilion.	18	25	58.7	+ 5.2	78	20	30	8	28	5.71	+ 1.40	2.35	0	11	6	10	15	se.	C. J. Edwards.		
Alexandria.	Rapides.	77	25	53.6	+ 4.7	75	19†	23	9	36	4.99	+ 0.02	2.25	0	5	8	3	20	s.	Nellie Graham.		
Amite.	Tangipahoa.	130	25	57.0	+ 5.8	80	5†	30	27	37	9.50	+ 4.15	2.20	0	8	7	17	7	s.	Lulu M. Wentz.		
Antioch.	Claiborne.	1	50.8			75	23	17	8	42	5.75		1.45	0	14	13	0	18	s.	W. L. Anglin.		
Avoca Island.	St. Mary.	9	2										4.83		0	7	9	15	7		J. N. Pharr & Sons.	
Baton Rouge.	East Baton Rouge.	60	25	60.0	+ 8.3	78	6†	34	8	35	5.57	+ 0.62	1.33	0	11	6	1	24	sc.	Elmo M. Bott.		
Burnside.	Ascension.	20	13	60.3	+ 6.6	79	6	35	3†	37	5.18	+ 0.81	2.30	0	6	12	7	12	s.	C. S. McFarland.		
Burwood.	Plaquemines.	1	25	61.2	+ 5.7	79	5	44	3†	22	2.77	- 0.98	0.96	0	4	8	3	20	se.	Graham Myers.		
Cades.	St. Martin.	3	57.8			77	20†	27	8	35	5.37		2.83	0	10	14	2	15	s.	C. E. Smedes.		
Calhoun.	Ouachita.	180	25	52.4	+ 5.9	79	1	21	8	52	5.84	+ 3.39	2.80	0	12	11	8	12	ne.	North Louisiana Expt. Sta.		
Cameron.	Cameron.	6	20	52.8	+ 3.3	74	20	19	8	36	2.76	- 0.95	1.52	0	10	14	7	1	ne.	Adolph Bruckert.		
Carrollton.	Orleans.	7	2	61.6		78	7†	34	28	30			0		9	7	2	22	e.	Loyola College.		
Cheneyville.	Rapides.	67	25	54.4	+ 4.9	76	18	26	7	41	5.08	+ 0.46	2.40	0	5	7	2	22	e.	Walter L. Tanner.		
Cinclare.	West Baton Rouge.	3	56.9			79	6	30	8	40	7.70		2.10	0	11	8	4	19	se.	Cinclare Central Factory.		
Clinton.	East Feliciana.	113	25	57.2	+ 6.6	79	6	30	28	35	8.97	+ 3.95	1.93	0	13	6	0	25	s.	John A. White.		
Collinston.	Morehouse.	65	12	52.8	+ 5.8	78	20†	24	8	42	6.45	+ 2.60	1.20	0	12	9	1	21	s.	John B. Reily.		
Columbia.	Caldwell.	39	21	57.9	+ 7.7	79	20	32	7	42	4.45		3.20	0	4	9	11	11	s.	H. W. Blanks.		
Covington.	St. Tammany.	4	53.6			76	20	20	8	40	6.05	+ 2.32	1.60	0	11	8	0	23	n.	Cecille P. Champagne.		
Dodson.	Winn.	34	4	53.6		76	20	20	8	40	6.05		1.01	0	11	9	6	16	s.	J. P. Lucas.		
Donaldsonville.	Ascension.	33	25	60.3	+ 7.3	82	6	28	8	40	9.44	+ 5.26	3.50	0	9	7	2	22	6.	John F. Park.		
Dutchtown.	do.	2											2.90	0	7	3	22	6.	Picard & Geismar (Ltd.).			
Farmerville.	Union.	177	25	49.8†	+ 3.2	75	6	20	8	40†	8.12	+ 3.77	2.45	0	11	9	2	20	s.	W. P. Chandler.		
Ferriday.	Concordia.	6																		C. L. Achor.		
Franklin.	Vermilion.	1	57.6			75	20	32	7	42	4.45		3.20	0	4	9	11	11	s.	White Lake Land Co.		
Franklin.	St. Mary.	10	21	59.3	+ 7.0	79	20	35	2†	37	5.13	+ 1.83	1.71	0	14	10	10	11	s.	J. M. Bouney.		
Franklinton.	Washington.	3	57.6			76	7	33	29	32	7.45		2.30	0	8					Herbert R. Babington.		
Grand Cane.	De Soto.	302	19	42.0	+ 4.8	70	5†	7	8	53	4.66	+ 1.27	1.35	0	8	9	2	20	n.	G. Foster Provost.		
Grand Coteau.	St. Landry.	93	25	56.4	+ 3.4	78	6	28	7	46	3.58	- 0.98	2.35	0	13</							

TABLE 1.—Climatological data for January, 1913. District No. 7—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.						Sky.	Prevailing wind direction.	Observers.	
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmetted.	Number of rainy days, 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.	
<i>Louisiana—Continued.</i>																			
Paradis.	St. Charles.	2									3.36		0.95	0	7	11	1	19	R. E. Boyce.
Pearl River.	St. Tammany.	29	7								6.63		2.20	0	14	5	17	e.	George F. Banks.
Plain Dealing.	Bossier.	268	21	49.4	+ 3.4	78	23	15	8	43	5.31	+ 1.24	1.15	T.	11	9	5	17	Leon Sanders.
Rayne.	Arcadia.	44	21	58.4	+ 5.5	86	20	30	8	28	7.31	+ 2.58	3.00	0	10	7	0	24	A. P. McNeil.
Reserve.	St. John Baptist.	12	55.4	+ 2.3	83	7	30	3	38	5.61	+ 1.32	2.35	0	7	7	16	8	Leon Godchaux Co.	
Richland Plantation.	Rapides.	1	54.6		75	21	26	8	33	5.25		2.15	0	10	12	1	18	A. B. Pendleton.	
Robeline.	Natchitoches.	147	17	50.9	+ 3.9	78	18†	19	8†	44	5.25	+ 2.93	1.90	0	8	9	2	20	Ruby McCook.
Ruston.	Lincoln.	312	18	52.4	+ 5.1	77	6	19	7	41	7.65	+ 3.70	2.70	0	10	22	0	9	Andor M. Larson.
St. Francisville.	West Feliciana.	115	10	56.2		75	7†	30	8†	45	7.89		2.59	0	11	8	11	12	G. W. Newman.
Schriever.	Terrebonne.	17	21	59.4	+ 6.4	80	6	34	28	37	5.10	+ 1.65	2.00	0	6	5	7	19	William H. Gautreaux.
Shreveport.	Caddo.	249	42	50.5	+ 4.3	73	20	16	8	34	4.21	- 0.21	0.95	0	14	11	3	17	U. S. Weather Bureau.
Simmesport.	Avoyelles.	42	7							11.10		3.74		0	13	4	0	27	C. T. Leigh.
Southern Univ. Farm.	Jefferson.	16									5.70	+ 2.38	2.55	0	8	4	11	16	F. L. St. Martin.
Sugartown.	Calcasieu.	20	57.4	+ 6.3	76	5	29	8	36	7.99	+ 3.25	3.31	0	6	7	12	12	G. W. Richardson.	
Talulah.	Madison.	91	6	52.4		78	6†	27	8†	51	5.96		1.96	0	11				Neal T. Halt.
Walker.	Livingston.	3	57.8		79	6†	31	2†	42	7.00		1.30	0	9	6	20	5	H. C. Fondren.	
Winnsboro.	Franklin.																	J. C. Carlton.	

* b, c, etc., indicate respectively 1, 2, 3, etc., days missing from the record.

** Temperature extremes are from observed readings of the dry bulb; means are computed from observed readings.

† Also on other dates.

T. Precipitation is less than 0.01 inch rain or melted snow.

TABLE 2.—*Daily precipitation for January, 1918. District No. 7, Lower Mississippi Valley.*

TABLE 2.—*Daily precipitation for January, 1913. District No. 7—Continued.*

TABLE 2.—*Daily precipitation for January, 1913. District No. 7—Continued.*

Stations.	Watershed.	Day of month.																														Total.				
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31				
Oklahoma.																																				
Ada.	Canadian			T.	.01	.09					.77	.16				T.	.04																	1.87		
Alva.	Arkansas			T.	.05			.10			.25	.12				T.	.05																0.20			
Apache.	Red					.05					T.																							0.60		
Arapaho.	Washita							T.																										T.	1.94	
Ardmore ||.	Red						.10					.94																						1.22		
Bartlesville.	Arkansas					.20					.10	.25																						0.40		
Beaver.	Canadian					.05	.15	.20																												
Blackburn.	Arkansas																																			
Cache.	Red																																			
Calvin.	Canadian						T.	.10				.80				T.	.04	.18																2.35		
Gandler ||.	do							T.				.31	.10																					0.92		
Chattanooga.	Red																																		0.66	
Chickasha.	Washita																																		0.14	
Cloud Chief.	do											.09		.05	T.																					
Crawford.	Canadian																																			
Durant ||.	Red						T.	T.				.10	.29	.05		T.	.11	.54		T.	.48												4.20			
Eldorado.	do						T.	T.				.10	.11				T.	T.															0.26			
Elk City.	do																																			
El Reno.	Canadian											.06																						0.46		
Enid ||.	Cimarron											.05	.10				T.																	0.12		
Erick.	Red											T.		.06	T.																			3.40		
Eufaula.	Canadian																																			
Fairland.	Arkansas											T.	.20																					2.84		
Port Gibson.	do											T.	.20	.03	T.	.63	.09		T.	.04	.14											2.60				
Frederick.	Red												.05																					0.56		
Geary.	Canadian												.05																					0.33		
Goodwell.	do												.05	.40	T.																			0.45		
Guthrie.	Cimarron													.20																					0.90	
Guymon.	Canadian																																			1.30
Hartshorne.	do																																			4.72
Healdton.	Red													T.																						1.54
Helena.	Cimarron																																			0.05
Hennessey.	do																																			0.55
Hobart.	Red																																			0.32
Holdenville ||.	Canadian																																			2.06
Hooker.	do																																			0.30
Hugo.	Red																																			5.83
Hurley.	Cimarron																																			0.80
Idabel.	Red																																			
Jefferson.	Arkansas																																			0.50
Kentou.	Cimarron																																			0.55
Kingfisher.	do																																			1.07
Lawton.	Red																																			0.60
Lawtonka Lake.	do																																			
McAlester.	Canadian																																			3.75
Mangum ||.	Red																																			0.03
Mariow ||.	Washita																																			1.75
May.	Canadian																																			0.20
Meeker.	do																																			1.90
Muskogee (1).	Arkansas																																			2.25
Muskogee (2).	do																																			2.50
Mutual.	Canadian																																			0.00
Neola.	Washita																																			0.46
Newkirk.	Arkansas																																			1.11
Norman.	Canadian																																			2.46
North Muskogee.	Arkansas																																			
Oakwood.	Canadian																																			0.28
Okeene.	Cimarron																																			1.65
Oklahoma.	Canadian																																			0.56
Okmulgee.	do																																			2.40
Pauls Valley.	Washita																																			1.80
Pawhuska.	Arkansas																																			1.69
Perry.	do					</td																														

TABLE 2.—*Daily precipitation for January, 1913. District No. 7—Continued.*

TABLE 2.—*Daily precipitation for January, 1913. District No. 7—Continued.*

* Precipitation included in that of the next measurement.
† Since date of fall not recorded.

[†] Separate dates of falls not recorded.
Precipitation for the 24 hours ending on the

Precipitation for the 24 hours ending on the morning when it is measured.
Precipitation is less than 0.01 inch rain or melted snow.

T. Precipitation is less than 0.01 inch rain or melted snow.

TABLE 3.—Maximum and minimum temperatures at selected stations for January, 1913. District No. 7, Lower Mississippi Valley.

Date.	Colorado.				New Mexico.				Texas.				Kansas.								Oklahoma.							
	Lamar.		Leadville.		Pueblo.		Albert.		Cimarron.		Amarillo.		Paris. §§		Dodge City.		Ellinwood.		Iola.		Liberal.		Wichita.		Ardmore. §§		Bartlesville.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1....	47	18	13	-13	38	24	51	9	45	25	59	31	68	33	49	26	51	23	55	30	52	26	51	34	70	38	61	29
2....	46	8	23	-8	54	9	48	10	51	3	43	20	47	35	44	17	46	16	41	22	52	15	41	25	46	40	42	30
3....	64	24	24	14	62	49	41	7	63	30	64	34	66	28	63	30	56	23	52	22	67	35	54	32	65	32	59	27
4....	58	20	21	-8	51	11	38	9	49	23	58	20	70	37	41	18	51	30	40	21	50	22	42	19	67	35	40	29
5....	20	4	-8	-21	11	-5	22	-2	23	2	20	4	67	45	18	2	43	6	22	11	23	8	20	5	36	28	27	26
6....	5	-3	7	-29	-2	-18	8	-6	6	-3	4	-2	24	24	2	-3	16	-2	11	7	32	8	5	2	18	15	26	13
7....	8	-13	-2	-26	9	-25	21	-2	19	-17	10	-1	22	16	10	-11	11	0	11	1	10	11	2	19	10	14	9	-2
8....	23	-12	31	-14	27	-10	20	1	30	-18	32	0	32	10	26	-14	23	-25	21	-3	25	-11	18	-10	34	-4	14	-2
9....	38	-2	20	1	40	4	42	6	35	-6	37	8	33	10	33	10	31	5	30	6	36	5	31	12	42	14	25	6
10....	38	0	17	2	44	12	48	4	41	-1	51	24	41	18	45	11	41	26	35	29	54	25	35	29	41	32	37	25
11....	31	10	11	-8	24	3	58	10	34	-2	35	12	47	32	15	3	27	5	35	6	43	17	34	5	43	36	37	18
12....	33	0	19	0	45	2	56	12	44	-3	48	10	36	18	26	1	20	-6	22	1	42	30	21	2	36	14	21	6
13....	35	10	35	4	35	16	54	10	43	18	50	25	48	19	24	11	19	7	26	9	35	20	20	11	50	24	37	19
14....	58	24	39	13	52	11	59	14	56	6	55	20	54	26	52	14	45	4	44	7	65	14	45	8	50	26	47	14
15....	54	26	34	9	54	38	48	11	56	24	62	29	64	32	59	31	61	36	53	43	35	20	59	40	65	65	43	
16....	60	28	19	5	52	28	56	12	46	28	54	42	65	48	56	41	57	38	58	52	45	35	55	49	70	50	65	40
17....	57	18	14	2	50	23	54	17	46	33	61	37	67	60	61	29	55	24	62	33	42	35	59	36	74	60	72	47
18....	63	17	32	7	58	22	64	22	57	14	58	25	67	46	51	20	49	18	47	28	45	20	49	27	65	40	57	32
19....	57	25	25	-1	56	26	59	19	55	35	65	35	69	45	52	21	54	30	63	30	47	31	54	25	66	45	73	44
20....	39	21	20	-15	29	11	57	16	44	16	48	21	65	45	29	14	30	12	30	13	58	20	25	15	37	35	44	24
21....	56	10	32	10	56	10	68	19	51	-3	47	15	45	25	49	13	50	14	37	11	27	13	42	12	43	20	47	25
22....	55	16	32	7	51	23	59	20	45	17	56	30	49	25	51	23	46	21	38	24	63	24	37	26	46	34	35	33
23....	48	28	23	0	39	22	64	18	43	18	43	28	61	39	41	22	44	29	43	28	55	28	43	29	56	40	49	31
24....	49	10	26	1	50	16	62	20	49	-1	54	22	50	42	54	19	53	13	46	24	55	15	46	23	51	40	60	29
25....	58	12	34	10	63	24	62	22	56	16	60	22	60	39	64	21	64	24	55	28	61	27	65	30	62	28		
Mns.	45.9	13.6	22.8	-0.3	43.6	14.3	50.7	12.5	45.3	11.0	48.5	21.6	53.6	32.0	42.8	16.1	44.4	16.4	40.9	20.4	48.0	20.2	40.4	20.8	51.5	32.5	46.8	27.0

Date.	Oklahoma.								Missouri.								Springfield.								Blandville, Ky.		Jackson, Tenn.		
	Enid. §§		McAlester.		Mangum. §§		Muskogee.		Oklahoma.		Weatherford. §§		Woodward.		Caruthersville.		Ironton. §§		Lamar. §§		Olden.		Springfield.						
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	
1....	55	35	58	44	47	27	65	31	62	37	61	32	58	34	60	29	55	18	57	31	56	29	59	33	56	33	53	28	
2....	50	32	65	39	50	28	57	34	45	28	50	26	47	20	53	34	39	25	60	26	62	31	43	30	59	30	53	28	
3....	48	31	57	31	56	30	58	23	60	34	61	31	67	27	44	21	26	41	21	52	21	48	20	46	21	41	24	44	29
4....	50	33	62	38	54	29	57	36	47	28	51	31	48	29	64	31	52	20	39	29	58	25	47	25	56	32	56	32	
5....	40	20	59	33	56	31	41	30	28	15	20	16	32	12	68	35	46	21	28	24	46	26	41	22	67	32	53	32	
6....	27	7	37	16	48	10	31	16	15	8	18	8	12	4	65	34	34	30	25	13	12	44	20	22	13	63	32	32	32
7....	16	5	19	12	38	6	31	12	15	4	18	3	12	2	37	32	30	19	12	10	26	19	15	9	36	32	32	32	
8....	15	-5	32	5	23	1	29	5	30	2	29	-1	32	-13	34	18	23	13	27	2	31	11	23	5	34	21	34	21	
9....	25	6	45	13	36	6	32	14	40	12	41	9	42	6	38	20	30	13	35	2	25	15	28	16	36	24	24	24	
10....	28	12	41	29	37	10	37	27	38	30	38	31	50	30	40	27	41	19	39	12	33	22	40	23	41	28	32		
11....	30	14	43	27	48	20	39	23	37	11	36	16	45	10	56	37	40	23	31	42	32	42	9	56	38	38	38		
12....	35	15	36	12	43	10	33	11	30	7	32	6	.....	2	47	24	28	8	26	4	40	28	28	5	38	16	38	16
13....	31	10	50	25	43	10	43	23	39	21	42	20	.....	12	44	24	40	14	35	6	42	12	36	17	37	24	53	28
14....	48	35	57	22	48	21	50	20	49	17	45	15	12	50	27	44	11	50	15	45	16	46	16	43	23	62	23	
15....	62	42	56	47	56	32	53	42	63	45	61	36	40	58	33</td													

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TABLE 3.—Maximum and minimum temperatures at selected stations for January, 1913. District No. 7—Continued.

Date.	Tennessee.				Arkansas.												Mississippi.											
	Kenton.		Memphis.		Bentonville.		Corning.		Dardanelle. §§		El Dorado. §§		Fort Smith.		Little Rock.		Pine Bluff. §§		Texarkana. §§		Wynne. §§		Clarkdale. §§		Corinth. §§		Greenville. §§	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1.....	57	24	62	36	61	29	61	21	69	29	64	32	63	36	67	27	68	30	60	24	65	29	60	28	67	29
2.....	55	32	57	34	42	23	46	23	57	35	46	31	54	35	55	28	59	35	54	20	58	30	62	30	58	34
3.....	42	27	49	31	52	23	57	22	64	32	56	26	58	28	59	28	66	29	53	23	55	30	44	29	58	33
4.....	63	26	67	42	57	32	60	23	72	34	63	36	68	41	71	30	72	35	67	28	70	31	68	30	71	35
5.....	68	36	70	50	54	24	66	22	75	46	55	34	67	55	78	40	70	45	70	42	73	44	66	40	74	46
6.....	63	37	66	36	24	13	37	25	65	63	34	24	55	31	61	46	45	42	44	43	67	62	68	60	71	66
7.....	43	32	40	29	16	8	32	23	38	36	24	14	32	21	37	33	30	29	37	33	52	40	70	61	52	44
8.....	45	21	29	21	26	4	27	13	35	18	29	10	25	15	31	14	36	13	26	19	32	24	28	26	34	24
9.....	39	24	38	25	37	13	32	13	39	20	30	21	34	21	37	20	42	18	38	19	41	24	46	24	42	24
10....	43	27	57	35	43	28	42	23	65	24	37	27	41	34	65	24	45	27	53	30	68	27	60	28	66	29
11....	59	41	66	40	44	14	38	32	50	36	48	23	57	34	65	35	47	38	64	40	69	39	70	38	68	42
12....	56	23	40	29	31	8	47	25	43	30	31	14	35	24	39	28	47	23	34	26	41	32	34	39	34	
13....	38	21	45	27	42	23	46	35	53	24	45	25	47	26	50	24	52	25	30	23	48	26	46	24	50	27
14....	48	21	52	33	51	22	48	24	60	25	49	28	50	30	56	24	58	28	45	26	56	26	58	24	60	29
15....	58	31	62	45	54	45	63	38	70	29	53	42	61	43	65	28	64	30	62	34	64	30	62	28	67	31
16....	61	52	62	53	63	54	65	39	68	49	66	53	67	55	65	37	67	34	57	54	63	44	61	40	63	46
17....	61	54	63	54	66	49	.....	.....	62	52	65	56	62	56	65	49	64	57	60	46	64	52	60	49	64	53
18....	57	38	58	51	56	32	.....	.....	59	41	64	55	59	44	59	48	61	55	66	52	57	48	64	56	64	55
19....	64	35	63	51	67	44	70	38	73	52	69	44	69	51	64	46	76	54	65	40	64	48	62	42	67	53
20....	67	42	68	33	61	18	63	53	73	62	64	23	64	34	68	57	68	60	50	71	60	70	54	71	61	
Mns..	53.8	31.9	54.2	37.8	48.4	26.5	52.3	30.7	59.7	36.9	50.5	31.6	53.8	36.4	57.9	33.6	58.1	35.8	51.9	34.1	57.7	36.9	55.4	36.4	59.1	39.4
Date.	Mississippi.						Louisiana.												Shreveport.									
	Kosciusko. §§		Natchez. §§		Vicksburg.		Alexandria. §§		Baton Rouge. §§		Covington. §§		Lafayette. §§		Lake Charles. §§		Monroe. §§		New Orleans.		Robeline. §§		Schriever. §§		Shreveport.			
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1.....	65	28	63	35	66	41	68	35	70	46	70	42	71	43	75	33	72	31	71	44	73	38	74	44	70	36		
2.....	68	31	46	36	65	39	65	35	66	57	71	53	73	47	80	40	61	53	72	46	61	42	76	46	57	37		
3.....	56	30	53	33	60	35	65	32	65	36	65	36	66	33	81	45	63	34	64	40	69	25	66	36	66	36		
4.....	69	32	70	47	70	46	70	34	70	51	70	38	72	35	85	47	73	40	70	51	75	35	73	36	72	48		
5.....	71	44	72	45	75	62	73	48	75	55	75	47	73	32	88	50	74	60	75	58	75	53	77	51	73	60		
6.....	70	60	75	64	74	63	74	62	78	68	78	62	78	65	87	60	76	68	77	67	72	63	80	63	67	33		
7.....	74	62	45	68	74	32	62	50	75	69	68	66	75	65	75	59	51	48	77	54	38	37	78	69	34	21		
8.....	35	28	35	27	37	27	50	24	69	34	66	40	44	29	46	22	48	23	74	40	32	19	53	38	32	16		
9.....	45	26	49	36	46	30	66	27	62	29	65	31	63	28	63	26	48	20	40	43	19	51	38	39	23			
10....	64	29	68	42	65	41	67	33	69	43	73	37	68	37	50	36	67	39	72	46	60	27	75	41	64	37		
11....	71	44	45	64	74	54	73	45	76	65	75	54	72	50	52	38	69	56	77	62	43	43	72	51	67	38		
12....	42	48	55	30	54	36	65	49	64	54	53	46	60	39	44	36	70	49	35	33	60	54	43	30				
13....	53	28	51	30	52	33	58	31	67	37	54	39	62	37	67	40	55	28	56	44	38	31	60	44	54	29		
14....	60	24	65	35	61	38	64	31	68	40	70	41	67	37	69	42	61	31	59	45	64	25	67	44	60	35		
15....	66	31	67	45	71	47	70	37	74	46	73	41	59	44	42	67	46	70	38	77	46	68	51	51	51			
16....	73	42	65	52	66	51	73	46	71	56	67	48	79	53	58	40	68	51	69	54	71	50	70	49	72	57		
17....	67	50	67	45	70	62	73	55	75	62	73	58	73	59	59	39	66	62	74	61	71	58	78	50	71	62		
18....	69	56	71	59	74	62	74	60	76	60	64	60	70	62	57	40	68	60	66	59	78	63	68	62	67	55		
19....	65	56	70	62	71	60	75	61	78	58	73	56	80	59	56	37	71	54	72	58	76	67	75	55	73	58		
20....	73	57	65	55	70	42	75	61	76	61	79	59	77	60	58	36	76	63	79	61	73	58	73	59	73	39		
21....	44	37	55	40	48	40	60	40	60	47	66	52	58	48	60	39	45	38	65	54	51	38	68	57	46	36		
22....	63	36	61	35	63	40	65	40	67	48	66	47	66	47	62	40	63	38	64	50	55	45	50	53	40			
23....	67	37	65	40	67	61	71	43	73	64	75	52	73	50	65	42	71	52	76	63	47	42	78	54	73	57		
24....	64	59	65	60	65	48	70	62	66	65	69	62	72	63	68	45	59	56	74	64	66	56	74	64	60	52		
25....	61	45	65	45	61	48	64	47	71	56	68	67	5															